

said single deflector on the surface to be scanned; and

a beam detector that receives the plurality of laser beams directed to outside of the predetermined imaging area via at least one lens element included in said imaging optical system, a synchronizing signal being generated upon detection of each of the plurality of light beams by said beam detector,

an optical characteristic of said imaging optical system being configured such that the laser beams directed to said predetermined imaging area are aligned in a scanning direction, while the laser beams directed to said beam detector are shifted in the scanning direction.

2. (Once Amended - Clean Text) The scanning optical system according to claim 1, wherein said single deflector comprises a polygonal mirror having a plurality of reflecting surfaces, one of said plurality of reflecting surfaces reflecting the plurality of laser beams during each scan, said polygonal mirror being rotated so that the laser beams reflected by said reflecting surface scan.

5. (Once Amended - Clean Text) The scanning optical system according to claim 4, wherein said diffractive lens structure is formed in an predetermined area on a surface of said refractive lens element, the laser beams directed to said imaging area passing

through said predetermined area, the laser beams directed to said beam detector passing through an area outside of said predetermined area.

6. (Once Amended - Clean Text) The scanning optical system according to claim 5, wherein said diffractive lens structure compensates for a lateral chromatic aberration of said at least one refractive lens element.

7. (Once Amended - Clean Text) A scanning optical system for exposing a predetermined imaging area on a surface to be scanned, comprising:

a plurality of light sources that emit a plurality of laser beams having different wavelengths, respectively;

a single deflector which deflects the plurality of laser beams simultaneously;

an imaging optical system that converges the plurality of laser beams deflected by said single deflector on the surface to be scanned; and

a beam detector that receives the plurality of laser beams directed to outside of the predetermined imaging area via at least one optical element included in said imaging optical system,

said imaging optical system having a first range and a second range along a scanning direction, the laser beams directed to said imaging area passing through said

first range, the laser beams directed to said beam detector passing through said second range, said imaging optical system being configured such that, within said first range, a lateral chromatic aberration of said imaging optical system is compensated for, and such that within said second range, a lateral chromatic aberration remains so that the plurality of laser beams are separated from each other in the scanning direction.

8. (Once Amended - Clean Text) The scanning optical system according to claim 7, wherein an optical characteristic of said imaging optical system, within said first range, is configured such that a plurality of beam spots respectively formed by the plurality of laser beams within said imaging area are aligned in the scanning direction, while the plurality of laser beams passing through said second range are incident on said beam detector at different timings.

Please add the following new claim for consideration by the Examiner:

--- 9. A scanning optical system for exposing a predetermined imaging area on a surface to be scanned to a plurality of laser beams, comprising:

a plurality of light sources that emit a plurality of laser beams having different wavelengths, respectively, during a scanning operation;